Alcatel and OMMIC collaborate

Alcatel and OMMIC are collaborating on the transfer of Alcatel's advanced HBT technology to OMMIC's Industrial Clean Rooms at its centre in Limeil-Brévannes, France. This transfer will complete OMMIC's commercial portfolio of III-V technologies and will provide Alcatel's System designers with a qualified source to develop 40Gbit/s transmission systems for core networks.

InP, now well established as the choice material for long wavelength (1.3 -1.6µm) optoelectronic devices, is receiving an increasing interest for its potential in microelectronic applications, ranging from millimetre-wave space and terrestrial communication systems, to very high bit rate fiber transmission systems (e.g. 10 and 40Gbit/s).

The InP HBT technology was developed by the Alcatel Research & Innovation Department in the framework of its studies into 40 Gb/s transmission. On top of the normal advantages of the conventional bipolar transistor (high current drive capability, very low threshold voltage dispersion), this InP DHBT process (actually a Double Heterojunction Bipolar structure is used) offers an exceptionally high cut-off frequency (greater than 200 GHz) with a breakdown voltage higher than 5 V. Using this DHBT technology, Alcatel has already developed prototype chip sets at 40 Gbit/s that have shown excellent results. These circuits include full rate D-type Flip-Flops for reshaping or decision circuits, multiplexer-drivers as well as Voltage Controlled Oscillators.

OMMIC, already known for its high frequency power PHEMT and MHEMT technologies, will now be one of the first foundries in the world to be able to offer its customers access to a leading edge InP HBT process.

Joëlle Gauthier VP of Alcatel Research & Innovation said "To prepare the future deployment of 40Gbit/s systems, Alcatel has to secure the industrial availability of all required technologies, and we feel InP DHBT is one of them. This is why OMMIC commitment to develop the InP DHBT process is very good news for us."

Wireless Facilities acquires High Technology Solutions

Wireless Facilities Inc, designer, deployment, integration, and manager of wireless telecommunications networks and security systems, has acquired High Technology Solutions Inc for approximately $48,7m.

HTS is a San Diego-based privately held provider of communications systems, engineering and operational outsourcing services to federal government agencies. The acquisition of HTS expands WFI into the government market for communications systems design and integration and the outsourcing of technical services, including wireless related IT systems and services.

HTS currently has more than 80 active contracts or task orders, and a backlog of over $130m.

For the year ending November 3Q,'03, HTS recorded revenue of approximately $44m.

ON Semiconductor refinances $48m

ON Semiconductor has filed with the Securities and Exchange Commission to offer, from time to time, up to 46m shares of common stock by the company and up to 17.25m shares of common stock by TPG Advisors II Inc, a selling stockholder.

The company has successfully refinanced approximately $48m of term loans under its senior secured bank facility with the proceeds of a new loan provided to the company's joint venture in Leshan, China by the China Construction Bank.

This reduces the interest rate on approximately $48m of ON Semiconductor's bank debt. The new loan facility is comprised of two $24m tranches, one with a 10-year term and one with a three-year term extendible for an additional three years under certain circumstances.

"As we continue to increase our presence in China, this transaction is an important step in financing our development and investment in this rapidly growing market," said Donald Colvin, ON Semiconductor senior VP and CFO. "Furthermore, the reduced borrowing rate is expected to save ON Semi conductor approximately $1m per year in interest costs."

Fabless start-up lands DARPA contract

The fabless start-up Kenet Inc has emerged from a stealth mode operation with a contract awarded by DARPA.

Under the contract Kenet will develop the ability to monolithically integrate its mixed-signal solutions with large digital systems.

Monolithic integration allows the realisation of all required functionality on a single chip, work is believed to involve improved radar and radio antenna signal processing.

Kenet was founded in April 2002 by MIT Lincoln Laboratory members and executives from companies such as Analog Devices and Globespan Virata.

It is backed by Venrock Associates, Kopin Corp and CP Group. The fabless house is a developer of mixed-signal semiconductor products and its first product is set for a first-quarter 2004 debut.

"With a formidable combination of technology expertise drawn from MIT Lincoln Laboratory and proven success at the industry's leading semiconductor companies, this team has what it takes to establish and sustain Kenet as a market leader," said John Fan, Kenet co-founder and chairman of the board.

Kenet's CTO, Michael Anthony is believed to have solved the problem of converting analog to digital at ultra-low power. Kenet is licensing 7 technologies covered by Lincoln Lab patents, 4 authored by Anthony.